

Amendment to the Claims:

This listing of claims will replace all versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An application-specific integrated circuit (ASIC), comprising:
switch circuitry for receiving a data frame from a first port and forwarding it to a selected access point on a predetermined port selected from a plurality of access points associated with a plurality of predetermined ports;

conversion circuitry in communication with the switch circuitry for converting a data frame between a first protocol and a second protocol;

inspection circuitry for inspecting attributes of the data frame;

decision circuitry for instructing the switch circuitry to forward the data frame based on the attributes; and

a memory mapped interface accessible to the plurality of wireless access points in data communication with the switch circuitry;

wherein the conversion circuitry converts the data frame from a first protocol to a second protocol and the switch circuitry stores the converted data frame in the memory mapped interface in a memory corresponding to the selected access point;

wherein a data frame is stored in the memory area corresponding to the selected wireless access point for transmitting the packet, the data frame remaining in the memory area until after the data frame is transmitted by the wireless access point and an acknowledgement for the data frame is received by a Media Access Control processor associated with the selected wireless access point.

2. (Original) The integrated circuit of claim 1 wherein the inspection circuitry is configured to inspect for wireless attributes and wherein the decision circuitry is configured to block non-wireless data frames from wireless ports.

3. (Original) The integrated circuit of claim 1 wherein the inspection circuitry is configured to determine whether a data frame is of higher priority than another data frame, and

wherein the decision circuitry is configured to grant precedence in forwarding to the higher priority data frame.

4. (Original) The integrated circuit of claim 3 further comprising a queue for prioritizing data frames, so as to provide quality of service.

5. (Canceled)

6. (Currently Amended) The integrated circuit of claim [[5]] 1 wherein the first protocol is an Ethernet network protocol and the second protocol is a wireless protocol.

7. (Canceled)

8. (Previously Presented) The integrated circuit of claim 1 further comprising circuitry for selectively retrieving data frames based on priority.

9. (Canceled)

10. (Previously Presented) The integrated circuit of claim 1 wherein the first protocol is an Ethernet network protocol and the second protocol as a wireless protocol.

11. (Previously Presented) A network switch comprising:
a first port configured to send and receive data frames configured in accordance with a first protocol;

a plurality of ports for connecting to a plurality of wireless access points, configured to send and receive data frames in accordance with a second protocol;

a microprocessor-driven application-specific integrated circuit (ASIC) comprising
switch circuitry for receiving a data frame and forwarding it to a predetermined port;
inspection circuitry for inspecting attributes of the data frame;

decision circuitry for instructing the switch circuitry to forward the data frame based on the attributes;

a memory mapped interface accessible to a plurality of wireless access points in data communication with the ASIC;

a forwarding table for maintaining a list of media access control addresses of wireless clients associated with the plurality of wireless access points;

a conversion circuit for converting a data frame received on the first port from the first protocol to the second protocol;

wherein the switch circuitry stores packets for the plurality of wireless access points in the memory mapped interface and provides Media Access Control layer processors associated with the plurality of access points with access to the packets;

wherein a packet is stored in a memory area corresponding to a wireless access point for transmitting the packet, the packet remaining in the memory area until after the packet is transmitted by the wireless access point and an acknowledgement for the packet is received by a Media Access Control processor associated with the wireless access point.

12. (Original) The network switch of claim 11 wherein the inspection circuitry is configured to inspect for wireless attributes and wherein the decision circuitry is configured to block non-wireless data frames from wireless ports.

13. (Original) The network switch of claim 11 wherein the inspection circuitry is configured to determine whether a data frame is of higher priority than another data frame, and wherein the decision circuitry is configured to grant precedence in forwarding to the higher priority data frame.

14. (Original) The network switch of claim 13 further comprising a queue for prioritizing data frames, so as to provide quality of service.

15. (Canceled)

16. (Previously Presented) The network switch of claim 11 wherein the first protocol is an Ethernet network protocol and the second protocol is a wireless protocol.

Claims 17 – 20 (Canceled)

21. (Previously Presented) The integrated circuit of claim 1, further comprising one of a group consisting of a core for 802.11 to 802.3 header stripping, a core for 802.11 to 802.3 encapsulation, a core for providing Message Integrity Check (MIC) hardware assistance, and radio client association tables.

22. (Previously Presented) The integrated circuit of claim 1, wherein the switch circuitry is configured to transfer the data frame from the memory area associated with the selected access point to a second memory area corresponding to a second of the plurality of access points responsive to determining that a wireless client to receive the data frame has roamed from the first access point to the second of the plurality of access points.

23. (Previously Presented) The integrated circuit of claim 1, further comprising a forwarding table that maintains a list of media access control addresses of wireless clients associated with the plurality of access points associated with the plurality of predetermined ports; wherein the switch circuitry acquires a media access control destination address in the data frame and determines from the forwarding table the predetermined port.